

Begin

REEL # 251

Mosenko, P.

KOSENKO, P., polkovnik

About demonstration lessons. Voenn. vestn., 41 no. 7: 59-60 J1 '61.
(Military education) (MIRA 15:1)

KOSENKO, P., polkovnik; KIYANITSA, P., general-leytenant voysk svyazi

Communications on the march and in a frontal encounter (replies to
the article of Col. Grankin published in "Voennyi Vestnik," No.3,
1961). Voenn. vest. 41 no.9:96-98 S '61. (MIRA 15:1)
(Communications, Military)

Kosenko, P.A.
KOSENKO, P.A., kandidat tekhnicheskikh nauk

Optimal roughness of friction surfaces. [Izd.] LONITOMASH
no.34:73-85 '54. (MIRA 8:10)

1. Dnepropetrovskiy inzhenerno-stroitel'nyy institut
(Surfaces (Technology))

ANDRIYENKO, Leonid Vasil'yevich [Andriienko, L.V.]; KOSENKO, P.F., red.;
TUBOLEVA, M.V. [Tubolieva], red.

[For the further development of the collective-farm system]
Za dal'shyi rozkvit kolhospnoho lahu. Kyiv, 1958. 47 p.
(Tovarystvo dlia poshyrennia politychnykh i naukovykh znan'
Ukrains'koi RSR. Ser.3, no.17) (MIRA 12:3)
(Collective farms) (Machine-tractor station)

KOSENKO, P.Ye., kand.tekhn.nauk; TYLKIN, M.A., kand.tekhn.nauk

Mechanized-feed and removal of flux in the automatic
build-up welding of metalworking equipment. Svar.
proizv. no.7:35-36 J1 '60. (MIRA 13:7)

1. Dneprovskiy metallurgicheskiy zavod im.Dzerzhinskogo.
(Welding--Equipment and supplies)
(Metalworking machinery--Maintenance and repair)

TYLKIN, M.A.; KOSENKO, P.Ye.; YEROSHKIN, M.G.

Introducing automatic control of oxyacetylene hardening of cylindrical gear. Biul.TSIICHM no.9:47-49 '60. (MIRA 15:4)

1. Dneprodzerzhinskiy vecherniy metallurgicheskiy institut (for Tylkin, Kosenko). 2. Metallurgicheskiy zavod imeni Dzerzhinskogo (for Yeroshkin).

(Case hardening) (Automatic control)

KOSENKO, P.Ye., kand.tekhn.nauk; SARANDACHEV, V.I., inzh.; YALOVY, N.I., inzh.

Protection of water-cooled heating furnace elements by metallized chromium-nickel coatings. Stal' 23 no. 3:257
Mr '64. (MIRA 17:5)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz im. M.I. Arsenicheva.

KOSENKO, P.Ye.; SAPRYKIN, V.P.; SARANDACHEV, V.I.; GARANCHUK, V.A.

Steel, injector-type burners, with protective coatings. Metallurg
10 no.12:37 D '65. (MIRA 18:12)

1. Dneprodzerzhinskiy metallurgicheskiy zavod-vtuz.

KOSENKO, P.Ye.; DUBINA, Yu.G.

Testing protective coatings on crown refractories. Ogneupory
30 no.6:24-26 '65. (MIRA 19:1)

1. Dnepropetrovskiy metallurgicheskiy zavod-vtuz imeni Arsenicheva
(for Kosenko). Metallurgicheskiy zavod imeni Dzerzhinskogo (for
Dubina).

KOSENKO, S.A.

YAFREMOV, V.V.; KOSENKO, S.A.; MAKARYCHEV, A.I.; MASLENNIKOVA, Ye.M.;
TIKHOMIROVA, A.H.

Effect of some vitamins B on the higher nervous activity. Vitaminy
no.2:40-60 '56. (MLBA 10:8)

1. Laboratoriya izucheniya vitaminov i laboratoriya vysshey
nervnoy deyatel'nosti Instituta pitaniya AMN SSSR, Moskva
(VITAMINS---B) (CEREBRAL CORTEX) (DEFICIENCY DISEASES)

KOSENKO, S. A. Cand Med Sci -- (diss) "Effect of vitamin B₆ deficiency upon the conditioned-reflex activity of white rats." Mos, 1957. 12 pp 21 cm. (Acad Med Sci USSR. Inst of ~~Research~~ Nutrition.) 200 copies (KL, 24-57, 121)

-77-

KOSENKO, S.A., KRAYKO, Ye.A.

Some data on the vitamin C supply of the child's body. [with
summary in English]. Vop.pit. 17 no.4:24-28 Js-Ag '58 (MIRA 11:7)

1. Iz laboratorii izucheniya vitaminov (zav. - prof. V.V. Yefremov)
Instituta pitaniya AMN SSSR, Moskva.
(VITAMIN C. metabolism
requirement in child. (Rus))

KOSENKO, S.A.

Importance of vitamin B₆ in ensuring the normal activity of the cerebral cortex in animals with various types of central nervous systems. Vitaminy no.4:123-129 '59. (MIRA 12:9)

1. Laboratoriya izucheniya vitaminov Instituta pitaniya Akademii meditsinskikh nauk SSSR, Moskva.
(PYRIDOXINE) (CEREBRAL CORTEX)

KOSENKO, S.A.

Significance of vitamin B₆ in the normal activity of the cerebral cortex. Zhur. vys. nerv. deiat. 10 no.2:291-296 Mr-Apr '60.

(MIRA 14:5)

1. Laboratory of Vitamin Study, Instituta of Diet, U.S.S.R. Academy of Medical Sciences, Moscow.

(PYRIDOXINE)

(CEREBRAL CORTEX)

BABADZHANYAN, M.G.; KALNYN', V.R.; KOSENKO, S.A.; KOSTINA, Ye.I.

Effect of supplementary vitamin intake on some physiological functions of workers in electric locomotive brigade. Vop. pit. 19 no. 5:18-24 S-O '60. (MIRA 14:2)

1. Iz otdela gigiyeny pitaniya (zav. F.M. Mirochnik) i fiziologicheskoy laboratorii (zav. - kand.med.nauk A.M. Volkov), Tsentral'noy nauchno-issledovatel'skoy laboratorii gigiyeny i epidemiologii Ministestva putey soobshcheniya SSSR i iz laboratorii izucheniya vitaminov (zav. - prof. V.V. Yefremov) Instituta pitaniya AMN SSSR, Moskva.

(VITAMINS)

(RAILROADS—EMPLOYEES—DISEASES AND HYGIENE)

MASLENIKOVA, Ye.M.; KOSENKO, S.A.

Excretion of riboflavin in children from 3 to 7 years of age.
Vop. pit. 21 no.5:31-36 S-O '62. (MIRA 17:5)

1. Iz laboratorii izucheniya vitaminov (zav. - prof. V.V. Yefremov)
Instituta pitaniya AMN SSSR, Moskva.

SHARPEKAK, Anatoliy Ernestovich; KOSENKO, Sergey Alekseyevich;
GOL'DENBERG, G.S., red.

[Laboratory work in organic chemistry] Praktikum po organicheskoi khimii. Moskva, Vysshaya shkola, 1965. 170 p.
(MIRA 18:4)

KOSENKO, S.I.

Calculation of the energy of earthquakes. Trudy Geofiz. inst. no. 21:
3-15 '53. (MLRA 7:5)
(Seismometry)

KOSENKO, S.K.

ADRIANOV, P.K.; ANDRIANOV, S.M.; BEHEZIKOV, B.S.; GOLOVKO, V.G. [Holovko, V.H.]; DOBROVOL'SKIY, A.V. [Doborovol's'kyi, A.V.]; DOVGAL', M.F. [Dovhal', M.F.]; YELIZAROV, V.D. [Ielizarov, V.D.]; ZHIZDRINSKIY, V.M. [Zhyzdryns'kyi, V.M.]; ZVENIGORODSKIY, O.M. [Zvenigorods'kyi, O.M.]; ZAYCHENKO, R.M. [Zaichenko, R.M.]; IVANENKO, Ye.I. [Ivanenko, I.I.]; KOMAR, A.M.; KOS'YANOV, O.M.; KAZAKOV, O.I.; KOSENKO, S.K.; KLIMENKO, T.A.; KIR'YAKOV, O.P.; KALISHUK, O.L.; LELICHENKO, M.T.; LEBEDICH, M.V.; MIKHAYLOV, V.O. [Mykhailov, V.O.]; MOROZ, I.I.; MOSHCIL', V.Yu. [Moshchil', V.IU.]; NEPOROZHNIY, P.S. [Neporozhni, P.S.]; NEZDATNIY, S.M. [Nezdatnyi, S.M.]; NOVIKOV, V.I.; POLEVOY, S.K. [Polevoi, S.K.]; PEREKHREST, M.S.; PUZIK, O.Ye. [Puzik, O.E.]; RADIN, K.S.; SLIVINSKIY, O.I. [Slivins'kyi, O.I.]; STANISLAVSKIY, A.I. [Stanislavs'kyi, A.I.]; USPENSKIY, V.P. [Uspens'kyi, V.P.]; KHORKHOT, O.Ya.; KHILYUK, F.P.; TSAPENKO, M.P.; SHVETS, V.I.; MAL'CHEVSKIY, V. [Mal'chevs'kyi, V.], red.; ZELENIKOVA, Ye. [Zelenkova, E.], tekhn.red.

[The Ukraine builds] Ukraina buduie. Kyiv, Derzh.vyd-vo lit-ry z budivnytstva i arkhitekt., 1957. 221 p. (MIRA 11:5)
(Ukraine--Construction industry)

K.
KOSENKO, S., inzh.-arkhitekt

Planning and building villages is the most important task of
designers and builders. Sil'. bud. 9 no.9:16-18 S '59.

(MIRA 12:12)

(Ukraine--City planning)

SHILIN, I. G.; KOSENKO, T. A.

Complex solving of the problem of the distribution and production
organization of butter and cheese industry enterprises. Isv.
vys. ucheb. zav.; pishch. tekhn. no.5:3-8 '62.
(MIRA 15:10)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova i
Moskovskiy institut narodnogo khozyaystva imeni Plekhanova,

(Industrial organization)

KOSENKO, V.

Mikhail Andreevich Shatelen; on his 90th birthday. Izv.AN SSSR.
Otd.tekh.nauk no.1:165-166 Ja '56. (MLRA 9:5)
(Shatelen, Mikhail Andreevich, 1866-)

KOSENKO, V.G.

18 27 27
1. Diffusion and Reliability of Iron in Germanium. A. A. Patel.
V. G. Kosenko and E. G. Mischenko. (Zhur. Tekh. Fiz., 1987,
27, Jan., 210-211. The range 760-840° K is covered.)

4522

RD
MT

KOSENKO, V.I.

Labor productivity and cost of metal scrap processing. Met.
i. gornorud. prom. no.4:34-35 JI-ig '65. (MIRA 18:10)

KOSENKO, V.K.

Incidence of tuberculosis infections in familial contacts from
foci of tuberculosis patients. Sbor. nauch. trud. Rost. gos. med.
inst. no.22:45-50 '63. (MIRA 18:7)

1. Iz kafedry epidemiologii Rostovskogo gosudarstvennogo meditsinskogo
instituta (zav. - prof. T.D.Yanovich).

VOLEVAKHA, M.M., KOSENKO, V.M., red., GANUSETS', O.I., red. [HANUSETS', O.I.]

[Atmospheric phenomena and indications of weather] Atmosferni
iavyscha i prykmety pohody. Kyiv, 1958. 31 p. (Tovarystvo dlia
poshyrennia polychnykh i naukovykh znan' Ukrain's'koi RSR. Ser. 5, no. 7)
(MIRA 11:10)

(Meteorology)
(Weather)

ROSENKOV, V.Y.
DEMESHEVA, G.A.; IVANCHIKOVA, B.I.; KRIVOSHAPKIN, M.A.; LEYCHIK, V.M.;
OVSYANKINA, V.I.; FEOKTISTOVA, V.P.; TSINMAN, M.Z.; BEKKULOVA, S.N.;
SUBKHANBERDINA, K.Kh.; RUBAKOV, P.I., laureat Stalinskoy premii,
spetsial'nyy redaktor; BALANINA, O.V., kandidat sel'skokhozyaystven-
nykh nauk, spetsial'nyy redaktor; SAKHAROVA, V.M., spetsial'nyy
redaktor; KOSENKO, V.V., spetsial'nyy redaktor; ZHIZNEVSKIY, F.V.,
otvetstvennyy redaktor; BURLACHENKO, L.A., redaktor; ALFEROVA, P.V.,
tekhnicheskiiy redaktor

[Experience of agricultural leaders of Kazakhstan; an annotated
bibliography] Opyt peredovikov sel'skogo khoziaistva Kazakhskoi SSR;
annotirovannyi ukazatel' literatury. Alma-Ata, 1955. 290 p. (MLRA 9:12)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. TSentral'naya nauchnaya
biblioteka. 2. TSentral'naya nauchnaya biblioteka Akademii nauk
Kazakhskoi SSR. (for Damesheva; Ivanchikova, Krivoshapkin, Leychik,
Ovsyankina, Feoktistova, TSinman)
(Bibliography--Kazakhstan--Agriculture)

KOSENKO, V. YE.

42052: KOSENKO, V. YE., MISELYUK, YE. R. - O Sepnistie-serebrinykh fotoelementakh i ikh primeneni v fotometrii, Kratkoe soederkhaniye doklada i preniy. Izvestiya Akad. nauk SSSR, Seriya Fiz., 1948. No. 4, s. 669

SO: Letopis' Zhurnal'nykh Statey, Vol. 47, 1948

KOSENKO, V. YE.

USSR/Physics
Photometry
Photoelectric Cells

Sep/Oct 48

"Silver Sulfide Photoelements and Their Use in Photometry," Ye. G. Miselyuk, V. Ye. Kosenko, Phys Inst, Acad Sci Ukrainian SSR, 3/4 p

"Iz Ak Nauk SSSR, Ser Fiz" Vol XII, No 5

Investigations of silver sulfide photoelements show that they have high selective sensitivity in wide spectrum interval, especially in red and infrared zones. They are also distinguished by great stability in spectrum characteristics. Discusses aging of such photoelements and desirability of producing them for photometric purposes.

PA 19/49T83

KOSENKO, V. YE.

PA 18/49T107

USSR/Physics
Photoelectric Cells
Red Light

Nov 48

"Physical Properties of Silver Sulfide Photo-
elements," V. Ye. Kosenko, Ye. G. Mibelyuk,
Inst of Phys, Acad Sci Ukrainian SSR, Kiev, 9 pp

"Zhur Tekh Fiz" Vol XVIII, No 11

Silver sulfide photoelements are very sensitive
to red rays and rays close to the infrared bands.
However, their use has been somewhat limited due
to lack of information on their properties. Also
noticed that actual performance of silver sulfide

18/49T107

USSR/Physics (Contd)

Nov 48

photoelements differs greatly from theoretical
performance data. Authors present results of tests
conducted on present-day photoelements manufactured
in USSR. Submitted 15 May 48.

18/49T107

KOSENKO, Viktor Yefimovich; SKOPENKO, Aleksandr Ivanovich; PISARENKO, M.,
redaktor; NOVIK, A., tekhnichnyi redaktor

[Semiconductors] Napivprovidnyky. Kyiv, Derzh. vyd-vo tekhn. lit-ry
URSR, 1956. 83 p. (MLRA 10:4)
(Semiconductors)

KOSENKO, V. Ye.

KOSENKO, V. Ye.

Diffusion of vaporized antimony and zinc in germanium. Izv. AN
SSSR. Ser. fiz. 20 no.12:1526-1532 D '56. (MIRA 10:3)

1. Institut fiziki Akademii nauk USSR.
(Germanium)

KOSENKO, V.Ye., Cand Phys-Math Sci -- (diss) "Properties of n-p transitions in germanium obtained by means of diffusion of admixtures from ^{the} vapor phase". Kiev, 1957, 15 pp (Acad Sci Ukr SSR, Inst of Physics), 120 copies. Bibliography at end of ~~the~~ text (10 titles). (KL, 1-58, 114)

- 3 -

SUBJECT USER / PHYSICS CARD 1 / 2 PA - 1943
AUTHOR BUGAJ, A.A., KOSENKO, V.E., WISELJUK, E.G.
TITLE The Diffusion and the Solubility of Iron in Germanium.
PERIODICAL Zhurn. techn. fis. 27, fasc. 1, 210-211 (1957)
Issued: 2 / 1957

For the experiments concerning the determination of the diffusion coefficient and the solubility of iron in germanium which were discussed here, iron with the radioactive isotope Fe^{59} was used. For the purpose of counting γ -rays a scintillation counter with a photomultiplier FEU-19 and with a NaJ-crystal were constructed. Pulses were transferred to a counting scheme and then to an electromechanic counter. Samples were cut out of monocrystalline germanium with the specific resistance $\rho \gg 40 \text{ ohm.cm}$ in form of plane-parallel disks of 20 mm diameter and from 3 to 6 mm thickness. For the determination of the utmost solubility of iron in germanium the germanium samples were electrolytically covered with iron on their flat sides, and after a sufficiently long diffusion annealing (by which uniform saturation of the germanium with iron is warranted), the excess iron was ground away from the samples. The concentration of iron in germanium was determined by radioactive counting (by comparison with the counting result obtained in the case of an exactly weighed radioactive iron preparation).

A graph illustrates the curve of the utmost solubility of iron in germanium in the temperature interval of from 750 to 940° C. As seen from the graph, the utmost solubility of iron in germanium changes at these temperatures from $5 \cdot 10^{14}$

INSTITUTION: Physical Institute of the Academy of Sciences of the USSR, Kiev.

AUTHOR: KOSENKO, V.E. PA - 2532
 TITLE: Investigation of Plane Germanium Diode Characteristics.
 (Issledovaniye kharakteristik ploskostnykh germaniyevykh diodov,
 Russian).
 PERIODICAL: Zhurnal Tekhn. Fiz., 1957, Vol 27, Nr 3, pp 452 - 460 (U.S.S.R.)
 Received: 4 / 1957 Reviewed: 5 / 1957
 ABSTRACT: A considerable rise of specific conductivity of Germanium plane
 diodes in the direction of passage was found. Also an irregular
 distribution of specific conductivity with respect to diode-thick-
 ness was observed. In the case of high amperages it is highest in
 the case of end layers. The phenomena observed prove that unstable
 carriers are drawn into great depths in the thickness of the semi-
 conductor by a passing current. The direct current in thick
 diodes at a constant voltage is to the thickness in the ratio of
 $i \sim d^{-2}$ (d...thickness of the diode). The passing through
 current is to the voltage in the ratio of $i \sim (v - v_k)^m$ (v...
 voltage, v_k ...diffusion-potential, i...current-density). Values
 of from 1 to 2 were observed for m. Opposite dependences of the
 passing-through current on temperature were observed in the
 domains of from 0 to $v \sim v_k$ and at $v > v_k$. In the domain of
 $v = 0,6 - 0,8$ volts the volt-ampere-characteristics intersect at

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Library of Congress.

KOSENKO, V. YE.

AUTHORS Bugay, A.A., Kosenko V. Ye., Miselyuk Ye. G., 57-8-6/36
 TITLE Diffusion and Solubility of Silver in Germanium.
 (Diffuziya i rastvorimost' serebra v germanii - Russian)
 PERIODICAL Zhurnal Tekhn. Fiz., 1957, Vol 27, Nr 8, pp 1671-1675 (U.S.S.R.)
 ABSTRACT The experiments were carried out for the purpose of supplementing the data on the admixtures in Germanium and for the purpose of a comparison between the experimental results and the diffusion theory. The investigation of the diffusion and the solubility of silver in Germanium was carried out according to the radioactive method using the silver isotope Ag^{110} . The experiments showed that the maximum solubility is reached at $875^{\circ}C$ and that it amounts to 1.10^{15} at/cbm. The authors show that, as regards the magnitude of the diffusion coefficient, silver takes the place between copper and gold, being much nearer to copper, nickel and iron. Therefore we can assume that the diffusion process of silver is the same as with these other elements. The comparison between the experimental results and the diffusion theory shows a good coincidence of Li, Ag and Fe with an exactness to the constant multiplicand $\gamma \sim \frac{1}{25}$ (depends on the kind of lattice of the solvent). The point for Ni in the experiments happened to be situated exactly on the theoretical straight line. (3 illustrations and 2 Slavic references).

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ASSOCIATION Kiev Institute for Physics of the Academy of Sciences of the Ukrainian SSR.
 (Institut fiziki AN USSR, Kiev).
 SUBMITTED February 21, 1957
 AVAILABLE Library of Congress.
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66343

SOV/181-1-10-18/21

~~24(6)~~ 24,7700

AUTHOR: Kosenko, V. Ye.

TITLE: Diffusion and Solubility of Cadmium in Germanium

PERIODICAL: Fizika tverdogo tela, 1959, Vol 1, Nr 10,
pp 1622 - 1626 (USSR)

ABSTRACT: A circular, polished germanium disk (diameter: 20 mm, thickness 1.5 mm, $\rho = 5.35 \text{ g/cm}^3$) was covered with radioactive Cd^{115} and sealed in an evacuated quartz ampule. The sample was annealed in the temperature range 760-915°C within 140-12 h. Layers were then taken from the samples, and the concentration of the cadmium diffused into the germanium was determined from the Cd^{115} radioactivity. Diffusion coefficient:

$D = 1.75 \cdot 10^{-9} \text{ cm}^2/\text{s}$. The solubility of cadmium in germanium reaches a maximum value ($2 \cdot 10^{18} \text{ cm}^{-3}$) at 840°C (Fig 1). The solubility at 960°C was measured by Ye. G. Miselyuk and V. N. Vasilevskaya with the help of a germanium crystal alloyed with cadmium. The diffusion coefficients of the elements B, Pb, Ga, As, Bi, Cd, P, Zn, and In in germanium are classified according to theoretical predictions. Cd and B are likely to diffuse into the germanium vacancies despite the

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Diffusion and Solubility of Cadmium in Germanium

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high activation energies. The results were discussed with
Ye. G. Miselyuk and T. I. Kucher. There are 4 figures and 11
references, 4 of which are Soviet.

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SUBMITTED: March 2, 1959

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KOSENKO, V.Ye.; MISELYUK, Ye.G.

Some characteristics of the FESSU silver sulfide photocells.
Prib. i tekhn. eksp. no.3:127-130 My-Je '60. (MIRA 14:10)

1. Institut fiziki AN USSR.
(Photoelectric cells)

S/181/61/003/001/009/042
B102/B212

AUTHORS: Ignatkov, V. D. and ~~Kosenko, V. Ye.~~
TITLE: Evaporation of germanium in tellurium vapors
PERIODICAL: Fizika tverdogo tela, v. 3, no. 1, 1961, 89-93

TEXT: When studying the diffusion of tellurium from the vapor phase in germanium, the authors detected that the evaporation rate of germanium was anomalously high compared to that in vacuo. This paper reports on this phenomenon which has so far been unknown in semiconductors. Germanium discs were used for these investigations (diameter: 18 mm; thickness: 1.5-2.0 mm; resistivity: 45 ohm.cm). The specimens were ground and etched (100 μ deep) and heated to 800°C within 1/2 hr in quartz ampoules with a vacuum of 10^{-5} mm Hg; then, they were cooled in dry, pure air, pure tellurium was added, and the ampoules were evacuated again. After this, the specimens in the ampoules were heated up to different temperatures by using two heaters (Fig. 1). Temperature was measured with Pt-PtRh thermocouples (error: $\pm 3^{\circ}\text{C}$). The evaporation rate of germanium has been

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Evaporation of germanium in...

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determined from the loss in weight of the specimen (with a known surface) (accuracy of measurement: ± 0.1 mg). The specimen and its surface have been studied very carefully. An X-ray examination of the Ge crystals showed that their lattice constant was equal to that of pure germanium up to ± 0.05 Å. As the tellurium concentration in the crystals was nearly equal to that in vapor (10^{17} cm $^{-3}$), they had n-type conductivity. Attempts to obtain larger crystals by varying temperature and duration of heating failed; the largest crystals were 2.3 mm. An investigation of the surface showed that evaporation took place unevenly (cf. Fig. 3). Looking at the picture (enlarged by a factor of 200) one can see that heating of germanium in tellurium vapor is a method to examine the Ge lattice structure. The dependence of the evaporation rate upon the tellurium vapor pressure has been investigated in the range of 10^{-7} - 10^2 mm Hg at a Ge temperature of 900°C; Fig. 4 gives the results. The evaporation rate W is independent of pressure above 1 mm Hg. The temperature dependence is given by: $W = W_0 \exp(-E/RT)$; E is the evaporation temperature, and W_0 is a constant. The plotted data ($W = f(1/T)$) represent a straight line. The slope of the line at $6 \cdot 10^{-1}$ mm Hg corresponds to 12.7 kcal/mole, which is $1/7$ of the

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Evaporation of germanium in...

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evaporation heat of Ge in vacuo. At 900°C, W of Ge in tellurium vapor is two orders of magnitude greater than that of Ge in vacuo, and at 700°C even four orders of magnitude. This effect is ascribed to the fact that tellurium diffuses several μ into germanium, and the evaporation of Ge takes place from a film having tellurium and germanium concentrations of the same order. A test with sulphur and selenium vapors showed the same effect but not as intensive. However, the evaporation rate of Ge is still higher than in a vacuum. Engineer R. M. Khaykin made the electron diffraction studies, and Engineer A. N. Kvasnitskaya grew the Ge single crystals. The authors thank V. Ye. Lashkarev, Academician of the AS UkrSSR, for discussions. There are 6 figures and 6 references: 4 Soviet-bloc and 2 non-Soviet-bloc.

ASSOCIATION: Institut fiziki AN USSR Kiyev (Institute of Physics,
AS UkrSSR, Kiyev)

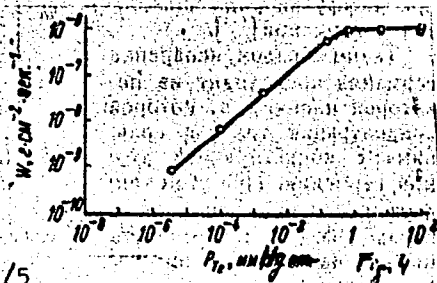
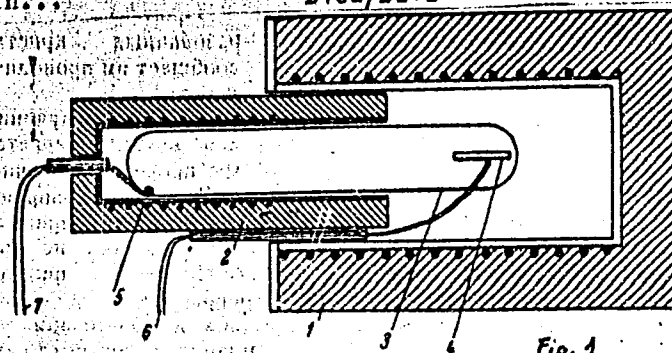
SUBMITTED: May 31, 1960

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Evaporation of germanium in...

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B102/B212

Legend to Fig. 1: 1) and 2) heaters; 3) quartz ampoules; 4) Ge specimen; 5) tellurium; 6) and 7) thermocouples.

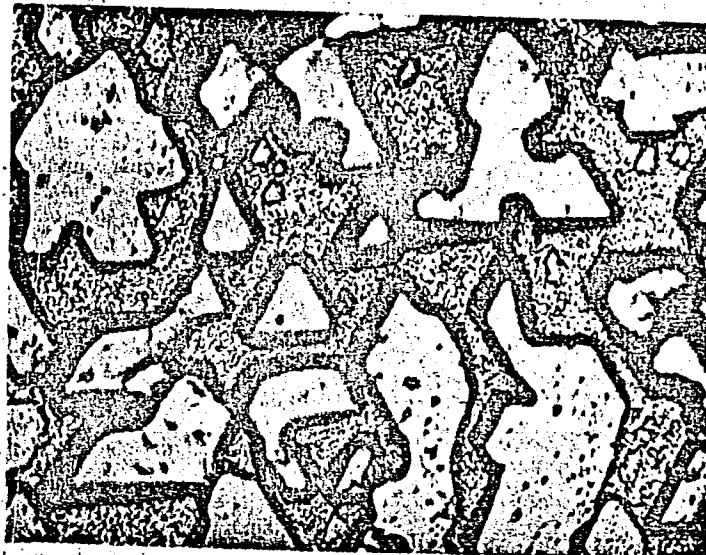


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Evaporation of germanium in...

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Legend to Fig. 3: Surface
of a Ge single crystal
after evaporation at
860°C for 12 hr.



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Fig. 3

20150

9.4300 (and 1043, 1035, 1143)

S/181/61/003/002/048/050
B102/B201

AUTHORS: Kosenko, V. Ye. and Nesterenko, B. A.

TITLE: Evaporation of silicon in tellurium vapors

PERIODICAL: Fizika tverdogo tela, v. 3, no. 2, 1961, 660-662

TEXT: The fact that germanium displays an abnormally high evaporation rate in tellurium vapors has already been established earlier (Ref. 1, FTT, 3, 1961); it was only natural to expect a similar behavior of silicon as well. A study has been made of the evaporation rate of silicon single crystals in tellurium vapors at temperatures of 700-1150°C. The method used was the same as the one described in Ref. 1. The Si specimens submitted to an examination had a resistivity of 10 ohm-cm; they were ground and etched to a depth beyond 100 μ (with three parts of 48% HF, five parts of 70% HNO_3 , three parts of acetic acid, and two parts of saturated aqueous $\text{Hg}(\text{NO}_3)_2$ solution).

The evaporation took place in a 20-cm long and 2-cm thick quartz ampul heated by two ovens; the temperature drop in the ampul was monotonic from one end to the other. The specimen was placed at the "hot" end. Once it was

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Evaporation of silicon ...

evaporated, the silicon crystallized at the "cold" end of the ampul in the form of regular crystallites; an X-ray analysis of the latter revealed that their lattice constant was equal to that of pure silicon. With the silicon specimen at a temperature of 1000°C the evaporation rate of silicon was found to increase monotonically with rising tellurium vapor pressure, and when the latter attained 100 mm Hg, it was found to be already more than 10^6 times as large as the evaporation rate of silicon into the vacuum. In fact, the tellurium vapors have a two-fold effect upon the silicon evaporation: on the one hand, they speed it up by an as yet unknown interaction mechanism, while on the other, they impede the passage of the evaporated Si atoms to the "cold" side of the ampul. The two effects are the stronger the higher the vapor pressure. The temperature dependence of the evaporation rate W is given by $W = W_0 \exp(-E/RT)$, where E denotes the evaporation heat; this function, in the form $\log W = \log W_0 - E/RT$, is with the measured values shown in Fig. 2 for 0 (1), $3 \cdot 10^{-4}$ (2), 10^{-1} (3), 10 (4), and 10^2 mm Hg (5). Curve 1 (zero pressure) has been calculated here on the basis of data found in the literature. The dependence of the evaporation heat on the tellurium vapor pressure P_{Te} is tentatively represented by the

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Evaporation of silicon ...

formula $E = E_0 - \alpha p_{Te}^n$, where E_0 is the evaporation heat on evaporation into the vacuum ($E_0 = 4.55$ ev), α and n are constants. In this case, $\log \Delta E$ ($\Delta E = E_0 - E$) will be a linear function of $\log p_{Te}$ (Fig. 3); the four measurement values $E = 0.6, 0.91, 1.5$, and 2.1 ev (for $p_{Te} = 10^2, 10, 10^{-1}$, and $3 \cdot 10^{-4}$ mm Hg) lie satisfactorily upon this straight line, which confirms the ansatz for $E(p_{Te})$. Numerically, $E = 4.55 - 3.3 p_{Te}^{0.04}$. V. Ye. Lashkarev, Academician of the AS UkrSSR and the senior scientific worker Ye. G. Miselyuk are thanked for advice. There are 3 figures and 3 references: 1 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Institut fiziki AN USSR Kiyev (Institute of Physics AS UkrSSR, Kiyev)

SUBMITTED: July 22, 1960

Card 3/4

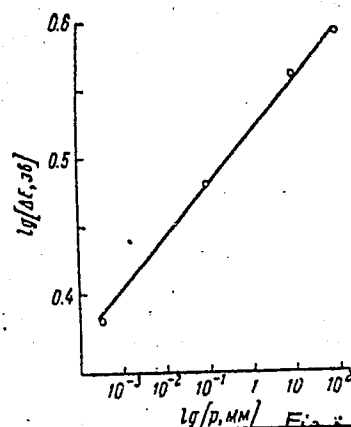
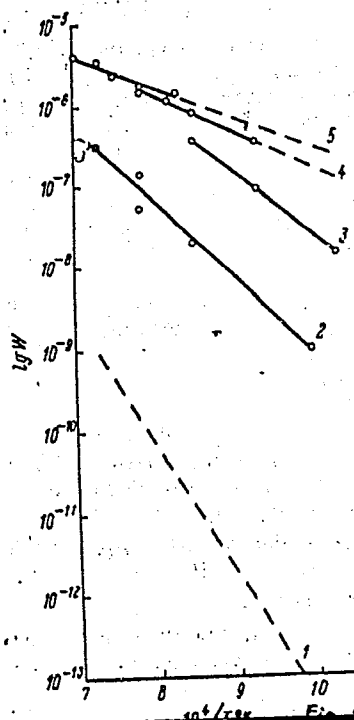
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Evaporation of silicon

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Figs. 2 and 3

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S/181/61/003/007/018/023
B104/B203

AUTHOR: Kosenko, V. Ye.

TITLE: Two diffusion mechanisms acting in germanium at the same time

PERIODICAL: Fizika tverdogo tela, v. 3, no. 7, 1961, 2102 - 2104

TEXT: As is known, the impurities in germanium can be divided into two groups with respect to their diffusion rate and solubility. The first group includes elements of groups I and VIII of the periodic system (e.g., Li, Cu, Ag, Fe, Ni) having a diffusion coefficient at 800°C in the order of 10^{-5} - 10^{-7} cm².sec. Their solubility at 800°C lies at 10^{14} - 10^{15} cm⁻³. The elements of the other group (In, Zn, Ga, Cd, B, Sb, As, P, and others) have, at 800°C, a diffusion coefficient in the order of 10^{-11} - 10^{-14} cm².sec; the solubility at this temperature is 10^{17} - 10^{20} cm⁻³. The author found that the "quickly diffusing" silver has a "slowly diffusing" component with higher solubility ($\sim 10^{18}$ cm⁻³). On the other hand, "slowly diffusing" indium and zinc have "quickly diffusing" components with lower solubility ($\sim 10^{14}$ - 10^{15} cm⁻³). With a suitable choice of the dimensions of the

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specimen and the diffusion time, two diffusion fronts differing in rate and concentration can be observed. Diffusion tests were made with the radioisotopes Ag¹¹⁰, Zn⁶⁵, In¹¹⁴, Te¹²⁵ by the method of removed layers. The diffusion of In, Zn, and Te occurred from the gaseous phase, silver was diffused by the method described in a previous paper by the author et al. (ZhTF, 27, 1671, 1957). Ge single crystals with a resistivity of $\rho \gg 35$ ohm-cm were used, the activity was measured with a γ -scintillation counter. In his experiments, the author assumed that the diffusion proceeded from a source with constant concentration C_0 , and that the solubility of the impurities was equal at a given temperature. Thus, the impurity concentration can be described by: $C(x,t) = C_0(1 - \text{erf } u)$, where $u = x/2\sqrt{Dt}$. The figure adjoined graphically shows results of measurement of the diffusion of tellurium in germanium at 800°C. Diffusion time was 52 hr 15 min. The "fast" and "slow" components with different solubilities are clearly to be seen. The values given in the table were determined together with V. D. Ignatkov. In all impurities, the two diffusion coefficients have a ratio of 10^4 - 10^5 , the solubilities of the two components have ratios of 10^2 - 10^4 . The fast component is identical with the diffusion over the

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Two diffusion mechanisms...

interstitial points, the slow component with the diffusion over the vacancies. There are 1 figure, 1 table, and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc.

ASSOCIATION: Institut poluprovodnikov AN USSR Kiyev (Institute of Semiconductors AS UkrSSR, Kiyev)

SUBMITTED: February 21, 1961

Table: Diffusion coefficients of slow (D_M) and fast (D_G) components of various elements in germanium. C_M and C_G are the solubilities of the corresponding components.

Table	D_M	D_G	D_G/D_M	C_M	C_G	C_M/C_G
Ag	$2 \cdot 10^{-12}$	$9 \cdot 10^{-7}$ [1]	$4.5 \cdot 10^5$	$4 \cdot 10^{18}$	$3 \cdot 10^{14}$ [1]	$1.3 \cdot 10^4$
In	$1.3 \cdot 10^{-12}$ [2]	$6.9 \cdot 10^{-8}$	$5.3 \cdot 10^4$	$4 \cdot 10^{18}$ [3]	$3.4 \cdot 10^{13}$	$1 \cdot 10^5$
Zn	$6.5 \cdot 10^{-13}$ [4]	$2 \cdot 10^{-8}$	$3 \cdot 10^4$	$2.5 \cdot 10^{18}$ [3]	$2.6 \cdot 10^{14}$	$9.6 \cdot 10^3$
Te	$3.2 \cdot 10^{-11}$	$5 \cdot 10^{-7}$	$1.6 \cdot 10^6$	$6 \cdot 10^{17}$	$2.5 \cdot 10^{13}$	$2.4 \cdot 10^4$

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KOSENKO, V. Ye.; NESTERENKO, B.A.

Evaporation of silicon in vapors tellurium. Fiz. tver. tela 3
no.2:660-662 F '61. (MIRA 14:6)

1. Institut fiziki AN USSR, Kiyev.
(Silicon) (Tellurium)

KOSENKO, V.Ye.

Two simultaneous diffusion mechanisms acting in germanium. Fiz.
tver.tela 3 no.7:2102-2104 J1 '61. (MIRA 14:8)

1. Institut poluprovodnikov AN USSR, Kiyev.
(Diffusion) (Germanium)

KOSENKO, V.Ye.; KHOMENKO, L.A.

Diffusion of silver on a germanium surface. Fiz.tver.tela 3
no.10:2967-2972 0 '61. (MIRA 14:10)

1. Institut poluprovodnikov AN USSR, Kiyev.
(Diffusion) (Silver) (Germanium)

24-7500 (1144, 1454)

29687
S/181/61/003/010/009/036
B102/B108

AUTHORS: Kosenko, V. Ye., and Khomenko, L. A.

TITLE: Diffusion of silver into a germanium surface

PERIODICAL: Fizika tverdogo tela, v. 3, no. 10, 1961, 2967 - 2972

TEXT: Surface diffusion studies with metals have shown that the surface diffusion coefficients are considerably greater than the volume diffusion coefficients. Since the respective data for semiconductors are not available, the authors investigated the surface diffusion of silver on pure germanium single crystals (resistivity 30 ohm*cm). The {111} faces of Ge plates of 30*20*1.5 mm were ground with a 10-μ abrasive powder and etched for 2 min in boiling perhydrol, or in HNO₃+HF (chemically polished specimens). The latter agent yielded a smoother surface. The silver was deposited from AgNO₃ aqueous solution as an 0.2-mm broad stripe or upon the end of the specimen. Diffusion annealing was carried out at 10⁻⁵ mm Hg. The distribution of the Ag tagged with Ag¹¹⁰ was investigated X

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Diffusion of silver into...

29687
S/181/61/003/010/009/036
B102/B108

by successive removal of thin layers. Previous investigations had shown that at 700°C the surface diffusion coefficient is by $10 - 10^2$ times greater than the volume diffusion coefficient. The surface diffusion coefficient was calculated from the relation $C(x,t) = \frac{Q}{\sqrt{\pi Dt}} \exp(-x^2/4Dt)$.

$C(x,t)$ is the concentration at the point x , Q the total quantity of silver, t the time, D the diffusion coefficient. The silver diffusion in two series of specimens (ground and polished) between 200 and 700°C was studied. At 700°C the surface diffusion rate exceeds the volume diffusion rate by 30 times for ground and by 5 times for polished specimens. At 200°C, the surface diffusion coefficient amounted to $8.7 \cdot 10^{-8} \text{ cm}^2/\text{sec}$ for a ground, and to $1.6 \cdot 10^{-8} \text{ cm}^2/\text{sec}$ for a polished

Ge surface. These values are 10^5 and $2 \cdot 10^4$ times higher than the corresponding values of the volume diffusion coefficients. The temperature dependence of the surface diffusion coefficient is given by

$D = D_0 \exp(-E/kT)$, i.e., $D = 5.4 \cdot 10^{-4} \exp(-0.37/kT)$ for the ground specimens and $D = 9.3 \cdot 10^{-5} \exp(-0.37/kT)$ for the polished ones. The

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Diffusion of silver into...

diffusion activation energy, i.e., the diffusion mechanism does not depend on the treatment of the surface. The difference in the D_0 -values is due to a difference in the number of surface defects. The surface diffusion coefficient as calculated from the relation $D_s = 1/8t \frac{d}{d(x^2)} \Delta \log C$ agrees

with the measured values. A determination of the "surface thickness" δ (a layer which is characterized by high mobility of the impurity atoms or ions) yielded values which were by some orders of magnitude greater than those for metals. The high surface mobility of impurities may be one of the reasons for semiconductor aging and destruction. There are 5 figures and 11 references: 4 Soviet and 7 non-Soviet. The four most recent references to English-language publications read as follows:
R. A. Nickerson, E. R. Parker. Trans. Amer. Soc. Met., 42, 376, 1950;
W. C. Winegard, B. Chalmers. Can. J. Phys., 30, 422, 1950;
H. Fraunfelder. Helv. Phys. Acta, IV, XXIII, 371, 1950; N. Haskerman,
N. H. Simpson. Trans. Farad. Soc., 52, 5, 628, 1956.

Card 3/4

Diffusion of silver into...

29687
S/181/61/003/010/009/036
B102/B108

ASSOCIATION: Institut poluprovodnikov AN USSR Kiyev (Institute of
Semiconductors AS UkrSSR, Kiyev)

SUBMITTED: April 17, 1961

Card 4/4

9.4177 (1035, 1051)

33242
S/181/62/004/001/009/052
B102/B138

AUTHOR: Kosenko, V. Ye.

TITLE: "Slow" diffusion of silver in germanium

PERIODICAL: Fizika tverdogo tela, v. 4, no. 1, 1962, 59 - 61

TEXT: As shown in a previous paper (FTT, 3, 7, 2102, 1961) one cannot speak of "rapidly" and "slowly" diffusing elements, since the first have a "slow", and the latter have a "fast" component. The coefficients of these components are different by some orders of magnitude from those of the normal ones. Now the author studies the temperature dependence of the "slow" component of Ag diffusion; Ag belongs to the elements of the "fast" group. The studies were made with Ge single crystals ($\rho \geq 30 \text{ ohm}\cdot\text{cm}$) and

silver nitrate solution tagged with Ag¹¹⁰. The concentration of the diffused silver was determined by removing thin layers by etching in boiling perhydrol. A scintillation γ -counter was used for determining activity. The "slow" diffusion coefficient, D, as a function of $1/T$ is a straight line. From its slope the activation energy of diffusion was found to be 51.5 kcal/mole or 2.2 ev, the diffusion coefficient is

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"Slow" diffusion of silver...

33312
S/181/62/004/001/009/052
B102/B138

$D_{\text{slow}} = 4 \cdot 10^{-2} \exp(-51500/RT)$, whereas the "fast" coefficient
 $D_{\text{fast}} = 4.4 \cdot 10^{-2} \exp(-23000/RT)$. The activation energy of "slow"
diffusion is twice as high as that of "fast". These two types of diffusion do not interact (penetration depth of the "fast" component: $\sim 6700 \text{ \AA}$, of the "slow" one: 8μ), there is a difference of 3 - 4 orders of magnitude in the concentrations ($C_{\text{slow}} \ll C_{\text{fast}}$). L. A. Khomenko, Junior Scientific collaborator, is thanked for assistance. There are 3 figures and 3 references: 2 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: F. A. Trumbore. The Bell Syst. Techn. J. 39, 205, 1960. X

ASSOCIATION: Institut poluprovodnikov AN USSR Kiyev (Institute of Semiconductors AS UkrSSR, Kiyev)

SUBMITTED: July 10, 1961

Card 2/p₂

S/181/62/004/006/038/051
B108/B138

AUTHORS: Ignatkov, V. D., and Kosenko, V. Ye.

TITLE: Diffusion of tellurium in germanium

PERIODICAL: Fizika tverdogo tela, v. 4, no. 6, 1962, 1627-1631

TEXT: Diffusion and solubility of tellurium in germanium single crystals between 770 and 900°C were studied. The experiments were performed in evacuated quartz ampoules at tellurium vapor pressure of 10^{-2} mm Hg. The isotope Te^{125} was used as a tracer. Diffusion was investigated by successive removal of thin layers. Three kinds of diffusion of Te in Ge, each at a different rate, were observed: (1) a new type, the so-called "surface-layer" diffusion with the diffusion coefficient $D_s = 2 \exp\left(\frac{-65000}{RT}\right)$. (2) "Slow" diffusion with $D_{sl} = 5.6 \exp\left(\frac{-56000}{RT}\right)$. (3) "Fast" diffusion. The diffusion coefficient of this type at 800°C was $5 \cdot 10^{-7} \text{ cm}^2/\text{sec}$. The respective concentration limits (solubilities) of Te in Ge at 800°C, each pertaining to its specific type of diffusion, were

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Diffusion of tellurium in ...

S/181/62/004/006/038/051
B108/B138

$2.5 \cdot 10^{20}$, $6.3 \cdot 10^{18}$, and $2.5 \cdot 10^5 \text{ cm}^{-3}$. There are 4 figures and 1 table.

ASSOCIATION: Institut poluprovodnikov AN USSR, Kiyev (Institute of
Semiconductors AS UkrSSR, Kiyev)

SUBMITTED: December 25, 1961 (initially)
February 19, 1962 (after revision)

Card 2/2

ACCESSION NR: AT4045013

S/0003/64/000/000/0188/0192

AUTHOR: Kosenko, V. Ye.; L. A. Khomenko

TITLE: Diffusion of silver at germanium surfaces

SOURCE: Soveshchaniye po probleme Izpol'zovaniye atomnoy energii. Kiev, 1961. Radiatsionnaya avtomatika, izotopy* i yaderny*ye izlucheniya v nauke i tekhnike (Radiation automation control systems, isotopes, and nuclear radiation in science and technology); doklady* soveshchaniya. Kiev, Izd-vo AN UkrSSR, 1964, 188-192

TOPIC TAGS: silver, germanium, silver diffusion, surface diffusion coefficient, volume diffusion coefficient, semiconductor, germanium monocrystal

ABSTRACT: Previous studies by various Western authors have shown that for metals the coefficient of surface diffusion is significantly larger than the coefficient of volume diffusion. However, similar studies have not been done on semiconductors, in particular, for germanium. The present paper attempts to fill this gap by studying the diffusion of silver at the surface of monocrystalline germanium. The volume diffusion of silver in germanium was studied by the same authors in earlier papers. In the present paper, films (30 x 20 x 1.5 mm) of pure monocrystalline germanium with a relative resistivity of

Card: 1/4

ACCESSION NR: AT4045013

nearly 30 ohm-cm were used. In one series of experiments the film was polished with emery paper and etched for two minutes in boiling perhydrol. In a second series the layer was cleaned in a mixture of HNO₃ and HF (5:3). The diffusion process was studied by the use of a radioactive indicator (Ag 110). The concentration of silver at a point x on the surface is given by

$$C(x, t) = \frac{Q}{\sqrt{\pi Dt}} \exp\left(-\frac{x^2}{4Dt}\right) \quad (1)$$

where Q is the total amount of the diffusing silver and D is the diffusion coefficient. This formula is a solution of the diffusion equation under certain assumptions. If log C is plotted against x² a straight line is obtained. This relationship is confirmed by the experimental data. Similar theoretical and experimental curves for the dependence of the diffusion coefficient on temperature are shown in Fig. 1 of the Enclosure. The formulas obtained for the surface diffusion coefficient also agreed with experimental data. Orig. art. has: 3 figures and 6 formulas.

ASSOCIATION: None

Card

2/4

ACCESSION NR: AT4045013

SUBMITTED: 07Jan64

NO REF SOV: 003

ENCL: 01

OTHER: 007

SUB CODE: SS

Card 3/4

ACCESSION NR: AT4046013

ENCLOSURE: 01

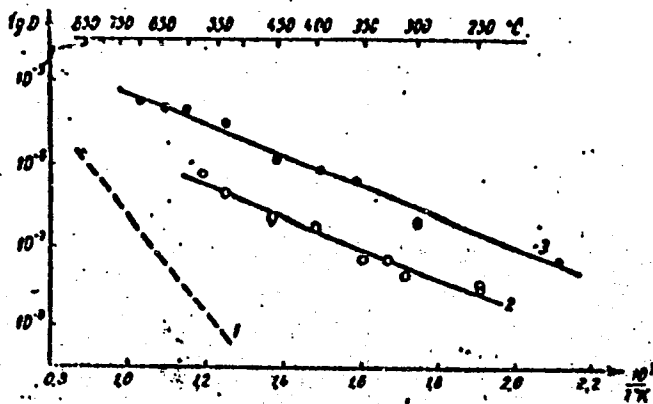


Fig. 1 - Temperature dependence of the diffusion coefficients:
 1 - volume diffusion of silver in germanium; 2 - surface diffusion on a chemically polished Ge surface; 3 - surface diffusion on an emery ground Ge surface.

Card

4/4

KOSENKO, Ye.

Excellent results. Kinomekhanik no.2:7 F'55. (MLRA 8:3)

1. Zaveduyushchiy Kalininskim rayotdelom kul'tury.
(Khomich, Iakov)

DUKHOVNAYA, S.A.; KOSENKO, Ye.D.

Interrepublic conference of psychiatrists and neuropathologists of Kazakhstan and the Central Asian republics. Zdrav. Kazakh. 17 no.12:63-64 '57. (MIRA 12:6)
(NEUROPSYCHIATRY--CONGRESSES)

ROSEN'CO, E. I.

34212. Somato-vegetativnyye Faktory v geneze otдалennykh nervno-psikhi-cheskikh rasstroystv posle ostrykh infektsiy. V sb: Problemy Kortiko-vistseral'noy patologii. M., 1949, s. 23^o-44

30: Knizhnaya Letopis' No. 6, 1955

KOSSENKO, Z. V.

"Remote Psychic Disturbances After Epidemic Typhus." Sub 9
Feb 51, Acad Med Sci USSR.

Dissertations presented for science and engineering degrees
in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

KOSENKO, Z.

Rasskazy_o zhizni mozga [Stories on the life of the brain] Moskva, Detgiz,
[1953?]. 176 p.

SO: Monthly List of Russian Accessions, Vol. 7 No. 2 May 1954.

Name: KOSENKO, Zinaida Vasil'yevna

Dissertation: Remote Psycho disorders after
severe forms of typhus

Degree: Doc Med Sci

Affiliation: State Inst of Psychiatry of the
Ministry of Health RSFSR

Defense Date, Place: 22 Feb 57, Council of the Depart-
ment of Clinical Medicine of the
Academy of Med Sci USSR

Certification Date: 8 Jun 57

Source: BMVO 16/57

34

KOSENKO, Z.V.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825110001-3"

Gos. nauch.-issl. psikhonevr. inst. no.20:213-221 '59.

(MIRA 14:1)

1. Institut psikhiatrii Ministerstva zdravookhraneniya RSFSR
(dir. - prof. V.M. Banskohikov), Moskva.
(SCHIZOPHRENIA)

KOSENKO, Z.V., doktor med.nauk; PARAMONOVA, E.G., kand.med.nauk

Neuropsychic disorders in patients with coronary atherosclerosis.
Klin.med. 37 no.7:72-78 J1 '59. (MIRA 12:10)

1. Iz kliniki lechebnogo pitaniya (zav. - prof.F.K.Men'shikov)
i serdechno-sosudistogo otdeleniya (zav. - doktor meditsinskikh
nauk V.P.Sokolovskiy) Instituta pitaniya AMN SSSR i Instituta
psikhiatrii Ministerstva zdravookhraneniya RSFSR (direktor -
prof.V.M.Banshchikov).

(CORONARY DISEASE psychol.)

(MENTAL DISORDERS)

MIKHAYLOV, Nikolay Nikolayevich; KOSENKO, Zinsida Vasil'yevna, doktor
med.nauk; VINNIKOVA, G.E., red.; SOKOLOVA, R.Ya., tekhn.red.

[Americans; an account of a trip] Amerikantsy; putevaia
povest'. Moskva, Sovetskii pisatel', 1960. 221 p.

(MIRA 13:10)

(United States--Description and travel)

BANSHCHIKOV, V.M., prof.; KOSENKO, Z.V., doktor med.nauk; ENTIN, G.M.

Vascular diseases and the role of alcohol in them. Sov.med. 25 no.6:
34-40 Je '61. (MIRA 15:1)

1. Iz gosudarstvennogo nauchno-issledovatel'skogo instituta psikiatrii
Ministerstva zdravookhraneniya RSFSR (dir. - prof. V.M.Banshchikov).
(ALCOHOLISM) (CARDIOVASCULAR SYSTEM DISEASES)

KOSENKO, Z.V., doktor.med.nauk; SAVCHUK, V.I., kand.med.nauk

Clinical characteristics and disorders of higher nervous activity
in cerebral vasopathy. Trudy Gos.nauch-issl.inst.psikh. 25:518-
537 '61. (MIRA 15:12)

1. Klinika sosudistyykh psikhovozov (zav. - prof. V.M.Banshchikov)
i otdel patofiziologii vysshey nervnoy deyatel'nosti (zav. -
prof. Yu.N.Uspenskiy) Gosudarstvennogo nauchno-issledovatel'skogo
instituta psikiatrii Ministerstva zdravookhraneniya RSFSR.
(NERVOUS SYSTEM) (CEREBROVASCULAR DISEASE)

KOSENKO, Z.V., doktor med.nauk

Neuropsychic disorders in patients who have had a myocardial infarction at a young age; preliminary report. Trudy Gos. nauch-issl.inst.psikh. 25:594-602 '61. (MIRA 15:12)

1. Klinika sosudistyykh psikhovozov (zav. - prof. V.M.Banshchikov)
Gosudarstvennogo nauchno-issledovatel'skogo instituta psikhiiatrii
Ministerstva zdravookhraneniya RSFSR.
(HEART--INFARCTION) (MENTAL ILLNESS)

MIKHAYLOV, Nikolay Nikolayevich; KOSENKO, Zinaida Vasil'yevna, doktor med.nauk;
VINNIKOVA, G.E., red.; BESSONOVA, N.D., tekhn. red.

[The Americans; travel tales]Amerikantsy; putevaia povest'.
2 izd. Moskva, Sovetskii pisatel', 1962. 237 p.
(MIRA 16:2)

(United States--Social conditions)

KOSENKO, Z.; REMEZOVA, A.; IVANOVA, G.A., otv. red.

[Stories of the life of the brain] Rasskazy o zhizni mozga.
Moskva, Izd-vo "Detskaya literatura," 1964. 190 p.
(MIRA 18:3)

Kosenkov, A.

107-57-7-53/56

AUTHOR: Kosenkov, A.

TITLE: Radio Equipment at the Leipzig Fair
(Radioapparatura na Leiptsigskoy yarmarke)

PERIODICAL: Radio, 1957, Nr 7, pp 59-60 (USSR)

ABSTRACT: Briefly described are radio receivers, tv sets, and tape recorders which were displayed by various countries at the Leipzig Fair, March 1957. Soviet, Czechoslovak, German (East and West), French, Belgian, and British equipment is described or mentioned. Soviet radio industry was represented by "Baykal", "Oktava", "Rodina" (thermopile-fed) radio receivers; by "Rossiya", "Lyuks", "Estoniya", "Druzhba" radio-phonograph combinations; by "Mir", "Soyuz", "Rekord", "Znamya", "Yantar", and "Moskva" (projection-type) tv sets; by an industrial tv outfit and "other equipment".

AVAILABLE: Library of Congress

Card 1/1

1. A. F. KOSENKOV, Eng.
2. USSR (600)
4. Automobiles
7. Private cars and their technical servicing. Gor.khoz. Mosk. 23 no. 8. 1949.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

VASIL'YEV, K.N.; VELESHIN, A.S.; KOSENKOV, A.R.

Ionospheric effect of the solar eclipse of February 15, 1961 according
to observations made in Moscow. Geomag.i aer. 1 no.2:277-278 Mr-
Ap '61. (MIRA 14:7)

1. Institut zemnogo magnetizma, ionosfery i rasprostraneniya
radiovoln AN SSSR.
(Eclipses, Solar--1961) (Ionosphere)

S/831/62/000/010/011/013
E192/E382

99100

AUTHORS: Vasil'yev, K.N. and Kosenkov, A.R.

TITLE: Operational radius of the ionospheric-station observations carried out on board the schooner "Zarya"

SOURCE: Ionosfernyye issledovaniya. Sbornik statey, no. 10. V razdel programmy MGG (ionosfera) Mezhdud. geofiz. kom. AN SSSR. Moscow, Izd-vo AN SSSR, 1962. 98-101

TEXT: An attempt is made to compare measurements of f_oF2 , carried out on the schooner "Zarya", with the values of f_oF2 of the fixed station at Yamagava (Japan), situated in the vicinity of the schooner's route. The comparison is based on the deviation Δf_oF2 from the average values rather than the absolute values of f_oF2 . For this purpose, the linear correlation coefficient ρ between the values of Δf_oF2 of the two stations is calculated. The number of terms taken for the evaluation of

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S/831/62/000/010/011/013

E192/E382

Operational radius of

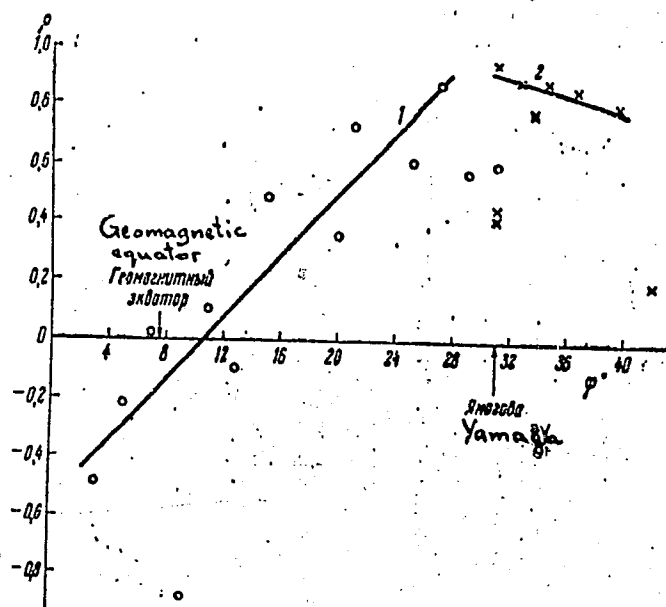
the coefficient ρ varied from 24 to 9 (if the number of "blanks" at one of the stations were 15). If a larger number of blanks were present, the data for that particular day were disregarded. The route of the schooner extended from New Guinea to the southern extremity of Japan and then to Vladivostok. This route was chosen because it was near to the meridian plane and because the data relating to the ionospheric stations in the vicinity of the route were available. The Yamagava station ($\varphi = 31^{\circ}12' N$ and $\lambda = 130^{\circ}37' E$) was conveniently situated. The measurements were made during April/May, 1960, when the ionosphere and magnetic field were only moderately perturbed. The values of ρ as a function of the latitudinal distance are shown in Fig. 1. It is seen that at low and near-equatorial latitudes the operational radius of the ionospheric station (which is determined by the value of $\rho = 0.5$) amounts to $5-7^{\circ}$. There are 3 figures and 1 table

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Operational radius of

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Figure 1:



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KOSENKOY, A. Ya.

AID P - 833

Subject : USSR/Chemistry

Card 1/1 Pub. 78 - 18/26

Author : Kosenkov, A. Ya.

Title : Mixing of petroleum products in consecutive pumping
through the main pipe line

Periodical : Neft. khoz., v. 32, #9, 77-84, S 1954

Abstract : Theoretical analysis of mixing of two different liquids
flowing in the pipe line is presented as function of basic
parameters. (Reynold's coefficient, ratio of densities,
and ratio coefficient of concentration). Laboratory ex-
periments confirm the proposed theory, which on the basis
of the theory of similarity can be applied to practical
cases. 4 charts, 2 tables and 2 Russian references
(1948, 1949).

Institution: None

Submitted : No date

L 16/23-65 EWT(m)/EPF(c)/T Pr-4 WE
ACCESSION NR: AR5000763

S/0058/64/000/009/H063/H063

SOURCE: Ref. zh. Fizika, Abs. 9Zh404

AUTHORS: Kosenkov, A. Ya.; Goryschko, G. V.; Baranov, A. I.

TITLE: Effect of ultra-acoustic field on the mechanical impurities in petroleum products

CITED SOURCE: Uch. zap. Kalininsk. gos. ped. in-t., v. 33, 1963, 3-17

TOPIC TAGS: petroleum, ultrasonic filter, mechanical filter

TRANSLATION: An experimental ultrasonic filter (UF) was prepared in the form of a disc 340 mm in diameter, perforated and covered with a copper grid with filament thickness 27 μ and with mesh 45 μ , having a filtering surface 200 cm²; the disc with the grid were soldered to the end of a nickel magnetostrictor of the NEL-4 type. During the course of the filtering, ultrasonic oscillations of frequency 20.5 kcs at an excited acoustic power of 400 W were applied to the UF; this yielded a per unit oscillation power

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ACCESSION NR: AR5000763

$\leq 0.5 \text{ W/cm}^2$. The UF was used in experiments on filtering of commercial diesel fuel (GOST 305-58). A qualitative control over the results of the filtering was effected by measuring under the microscope the maximum size of the mechanical-impurity particles ahead and behind the filter. At a mesh dimension of 45μ , the particle sizes of the mechanical impurities passing through the filter was $\leq 15 \mu$; i.e., smaller than those passed by a cloth filter. This was attributed to the effect of the ultrasonic field. The experiments have shown that other advantages of the UF over cloth and other mechanical filters are the appreciably larger rate of filtration with a smaller filter pressure drop and the considerably longer time elapsed before the filter clogs up. A. Ravikovich.

SUB CODE: IE, GP

ENCL: 00

Card 2/2

KOSENKOV, M. A.

USSR/Miscellaneous - Radiofication

Card 1/1 Pub. 133 - 13/23

Authors : Kosenkov, M. A., Head of Belaya Tserkov' District Communications Office

Title : Radio in Kolkhoz dwelling houses

Periodical : Vest. svyazi 8, page 20, Aug 1954

Abstract : Information is given on the progress made in the radiofication of the Belaya Tserkov' District in the Kiev Region, namely, the number and location of radio centers; number of newly installed radio-outlet points; position and number of public address systems (loudspeaker points); and the number of new radio-receivers. The individual contributions of several radio workers to the development of radio in the Kolkhozes are pointed out.

Institution: ...

Submitted : ...

KOSENKOV, M.A.

Work constructively and with initiative. Vest.svyazi 16 no.5:
19-21 Je '56. (MLBA 9:8)

1. Nachal'nik Belotserkovskoy kontory svyazi.
(Belaya TSerkov'--Telecommunication) (Postal service)

MALYSHEVA, Nadezhda Ivanovna; BARYSHNIKOV, Aleksandr Vasil'yevich;
KOSENKOV, Nikolay Ivanovich; POMIN, P.D., nauchnyy red. [deceased];
GABOVA, D.M., red.; MEDVEDEV, L.Ya., tekhn.red.; KNAKHIN, M.T.,
tekhn.red.

[Design and control of Cotton machines] Ustroistvo i regulirovanie
kottonnykh mashin. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po
legkoi promyshl., 1959. 221 p. (MIRA 12:12)
(Knitting machines)

KOSENKOV, O.M.

Electromagnetic field of a circular loop at the earth-air
boundary. Izv. AN SSSR. Ser. geofiz. no.12:1845-1851 D '63.
(MIRA 17:1)

1. Kompleksnaya tematicheskaya geofizicheskaya ekspeditsiya.

KOSENKOV, S.

Outboard motorboats, hydroplane boats, motorboats.
Za rul. 17 no.3:12-13 Mr '59.

(Motorboats)

(MIRA 12:5)

KOSENKOV, S.A., inzhener.

Efficient design of hoisting and conveying equipment used for
installation of precast bridges. Avt.dor. 20 no.3:20-22 Mr '57.
(MLRA 10:5)

(Bridges--Construction)

KOSAKOV S.V.

VORONTSOV, I.F.; KOSENKOV, S.V.; YAKOVLEV, N.P.; BALDIN, Ya.Ye.;
SOKOLOV, N.A.; BESHKAREV, N.A.; LYUKSHIN, H.G.; SLAVNOV,
V.P.; CHUVAKOV, N.Ye., redaktor; DMITRIYEV, A.A., redaktor;
KUZ'MIN, I.F., tekhnicheskij redaktor.

[Manual for boys under military age] Posobie dlia doprizy-
vnika. Izd.2-e, ispr. i dop. Moskva, Voen. izd-vo Ministerstva
oborony SSSR. 1955. 351 p. (MLRA 8:11)
(Military education)

KOSENKOV, V., inzh.; RYNKOVENKO, O., inzh.

Repairing the body of the LiAZ-158 motorbus. Avt. transp.
41 no.6:34-35 Je '63. (MIRA 16:8)

FARAMAZOV, S.A.; KOSENKOV, V.G.; AKHMEDOV, K.R.

Stabilizing the draft of pipestill flues. Nefteper. i neftekhim.
no.4:45-47 '65.

(MIRA 18:5)

1. Bakinskiy neftepererabatyvayushchiy zavod im. XXII s"yezda
Kommunisticheskoy partii Sovetskogo Soyuza.